

These notes are in the following order:

1. Attendance
2. Correspondence and handouts
3. Quorum
4. Administrative including approving draft notes from October, Comments from Mike Holland, Manager, Brookhaven Area Office
5. Presentation on Nanoscience, Ron Pindak, Interim Associate Director, Brookhaven Nanocenter
6. Presentation on How Pollution Prevention Can Work For You, George Goode, Environmental Services Division
7. Community Comment
8. Presentation on Brookhaven's Long Range Research Plans, Peter Bond, Special Assistant to the Director.
9. Agenda Setting

1. Attendance

See Attached Sheet

Others Present:

P. Bond, L. Cunniff, J. D'Ascoli, K. Geiger, K. Grigoletto, R. Hodgins, M. Holland, M. Lynch, J. Petschauer, R. Pindak, T. Sheridan, K. White

2. Correspondence and Handouts

Items 1 - 3 were mailed with a cover letter dated November 8, 2002. Items 4 - 6 were included in the folders and item 7 was available at the meeting as a handout.

1. Draft agenda for November.
2. Draft notes for October.
3. Final notes from September.
4. Copies of draft letters to Dr. Peter Paul and Dr. Raymond Davis re receiving the Nobel Prize.
5. Copy of Nanoscience presentation
6. Copy of Brookhaven's Long Range Research Plans,
7. Copy of George Goode's Pollution Prevention presentation.

3. Quorum

The meeting began at 6:35 p.m. A quorum is established when 55% of the 27 member organizations (15) are in attendance.

4. Administrative

Reed went over the ground rules and the agenda and discussed the request from the last meeting to indicate organizationally who was present and who was not. He described the matrix that is currently kept and asked if that being added to the minutes would serve the CAC's purpose of showing what the organizational attendance is? The CAC agreed that it would.

The notes from the October 10 meeting were reviewed. There was one correction. Sid Bail was listed as being both present and absent, he should be listed as present only. The notes were approved with one abstention.

Action Item: Matrix to be included with notes each month.

Michael Holland has returned from his assignment at Oak Ridge, TN. He said that he was happy to be back and spoke briefly of his experience. He explained that Oak Ridge is a very large operation, not just a National Laboratory, but a weapons facility and they have a large environmental cleanup operation that is ongoing. He said that he saw many similarities between Oak Ridge and Brookhaven and pointed out that both have very educated and involved communities. While Brookhaven has the CAC, they have a Site-specific Advisory Board. He said that he was glad to be back and looking forward to working in partnership with the CAC on the issues.

The letters of congratulations that the CAC requested be sent to the Laboratory and to Dr. Davis were discussed. Jeanne D'Ascoli and Anthony Graves had prepared them. The letters were approved as written. It was decided that they did not need a signature as they indicated they were from the entire CAC.

5. Presentation on Nanoscience, Ron Pindak, Interim Associate Director, Brookhaven Nanocenter

Dr. Ronald Pindak discussed the challenges and potential impact, how the U. S. is positioning itself to be competitive in the field, and how the Laboratory is responding to the challenges of nanoscience. He explained that prior to coming to the Laboratory a year ago he had worked at Bell Laboratories for 24 years. Dr. Pindak discussed what nanoscience is and showed a scale of small objects that went from small to ultra small. He explained that halfway down the scale presented the micro world. He described a micro meter as being one millionth of a meter. He said the diameter of a human hair is tens of micro meters in size. Much of today's technology takes place at this scale and pointed to the pixels in computer hard drives which are about a hundred micro meters in size. He said that the nano-world is down in smallness by another factor of a thousand. He stated that a nano meter was one billionth of a meter. Once you've gotten to this level, the discreteness of matter, the individual atoms that make up materials, can be seen. He said that the fundamental properties of matter are different at the nanoscale. Some of the challenges that Pindak described are to be able to understand and predict the properties of the materials, to manufacture nanoscale assemblies, and to integrate nanoscale components into macroscopic scale objects and devices.

Dr. Pindak talked about the five DOE Nanocenters that are planned and how they will be operated and talked specifically about the Brookhaven Nanocenter, it's construction, and the types of research that might take place here.

CAC members asked questions about the time line for the technology, if it has homeland defense possibilities, the source of funding, if it could self-replicate, if any jobs would be created, if there were concerns about health, and if the research would be used for developing weapons.

Pindak said that it would be at least five or six years before any of the technology was available for security applications, some of the funding is new, some will come from NYS, and some will

come from partnering with Users. He said that there is no bio kind of element planned for the center, and finally that no weapons research will be going on at the Lab.

6. Presentation on How Pollution Prevention Can Work For You, George Goode, Environmental Services Division

Lori Cunniff, Manager, Environmental Services Division, gave the presentation for George Goode who was out with the flu. Cunniff gave an overview of the BNL P2 Program. She talked about using process maps and the scope and structure of the program. She described the roles of the P2 Manager, the P2 Council, which is made up of one representative from each of the 11 directorates, and the Environmental Compliance Representatives. The charge of the P2 Council is to: Assist with development, establishment, management, and promotion of the Lab-wide pollution prevention and waste minimization program. She said that the Return-On-Investment program is how proposals are selected. It invests in projects that: reduce waste via process changes and substitution; saves money; or improves safety and/or lowers risk. She described several initiatives including photographic, painting, and metal cleaning where the process had been changed to reduce waste generation. She noted that the Laboratory recycled 82% of its waste in 2002 and said that pollution prevention is an ethic that goes throughout the Laboratory.

Cunniff described the process mapping technique and used coffee making to explain how it works. She said that the object of the process map is to figure out what is coming out of the process so that you can start thinking about how to cut steps out or make substitutions that will cut waste and/or costs. Cunniff said that pollution prevention is part of the Laboratory's continuous improvement initiative. She noted that there was additional information about pollution prevention included at the back of the copies of the presentation.

CAC members asked questions about setting up a community education program onsite, where the money saved goes, disposal of alkaline batteries, if information about the program has been shared with the Town of Brookhaven, if there is a waste exchange program onsite, and if there is a program for the Lab's used tires. Member Sprintzen said that he would be glad to have the program brought to the two colleges he is affiliated with, CW Post and Southampton.

Following the discussion on the P2 Program, Lori Cunniff announced that she had resigned from her position at the Laboratory and will be moving to Orange County, Florida. She thanked everyone for their support over the past two years. She said that ESD has a very dedicated staff and acknowledged those who have made presentations to the CAC. She also listed completing the Memorandum of Agreement between the EPA and DOE, the Facility Review Disposition project, the ISO 14001 registration, the Environmental Management System, the SER, the Pollution Prevention Program, and being selected by Environmental Protection Magazine as one of the five Facilities of the Year as some of the accomplishments achieved during her tenure. She said that she would be leaving at the end of the month and that Bet Zimmerman, who had previously managed the division, would be filling in while the selection process for a new manager is being conducted.

7. Community Comment

There were no comments from the audience.

Mark Walker made an announcement about the BNL Art Show, November 25 –27, and encouraged members to attend the reception on the 25th at 5 p.m.

8. Presentation on Brookhaven's Long Range Research Plans, Peter Bond, Special Assistant to the Director.

Peter Bond discussed the Laboratory's long-range research plans. He gave some background information about research: why people do it; why it's valuable; and why government funds it. He said that he feels there are three reasons why people do research. People are curious, they want to discover something new or they are trying to solve a specific problem like curing cancer. He talked about Applied Research and Basic Research and described the differences. He told how the MRI had been developed with information learned 80 years ago through basic research. Government funds research because it's been proven that the economic vitality of a country depends strongly on the research effort that it expends. He said while there is some private funding, over the years most companies have diminished their basic research programs. In looking at profits, it takes too long for basic research to pay off.

Bond talked about the research that is going on at the Laboratory. He mentioned RHIC, Nanoscience, Medical Imaging, and said there are many others. He said that the Lab always has to be planning ahead - to stay at the forefront of research and because there is such a long lead time to get large projects funded. He explained that ideas for research projects come from scientists and are debated in planning committees. Why the research should be conducted at BNL, why it is interesting, what funds are required, and how it will impact Lab infrastructure are some of the things considered. National priorities are also considered. He displayed a matrix that showed the projects for the next five years. They were divided between programs that were realistic, possible, and dreams.

Bond also talked about major construction projects. He showed a time line for them and talked about why they are needed and what their cost is projected to be. He noted that a major upgrade is being planned for the NSLS. It was the first light source built in this country and it's been enormously successful but improvement are needed for it to remain state-of-the-art. The Lab prioritizes these projects, then goes to DOE and makes a case for funding for the project. After DOE agrees to make it a priority, they make a request to the President and to the Office of Management and Budget. If they agree to make it a priority, it goes to Congress for funding approval. It is a very time consuming process. He summed up by reiterating that long term planning was a needed and continual process.

9. Agenda

- g-2
- Budget update (if appropriate)
- OU V Update
- Planning for the D&D of the three reactors (request from Scott Cullen)(will be on the agenda as soon as its ready)
- Phytoremediation Update

Member Henginan asked for a presentation about the educational programs.

Member Talbot asked for a presentation on ISO 14001 (structure, what certification entails, how implemented)

Meeting was adjourned at 8:58 p.m.